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### REMARKS

Claims 1-20 are pending in this application. By this Amendment, claims 1, 6-10, 15 and 18 have been amended. Support for the amendments is found throughout the Specification. No new matter was added.

The Japanese document listed in the IDS of July 9, 2004 was not considered because it was incomplete. A supplemental IDS will be submitted with a complete copy of this reference.

The disclosure was objected to because of informalities. On page 4, line 28, the term "significant" replaced the inadvertently misspelled word. On page 5, line 14, the word "amputee" was pluralized.

Claims 6-8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 6 and 7 have been amended to recite "the means for reducing loss of vacuum against the residual limb during a weight-bearing phase or during a non-weight bearing phase comprises," thereby indicating which of the "means for reducing loss of vacuum" are being referenced. Claim 8 has been amended to recite "the means for reducing loss of vacuum against the residual limb during a weight-bearing phase and/or during a non-weight bearing phase comprises," thereby indicating which of the "means for reducing loss of vacuum" are being referenced. With this clarification, claims 6-8 are not indefinite and Applicant respectfully requests withdrawal of this rejection and allowance of these claims.

Claims 1-20 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,726,726 B2. Claims 1-9 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,926,742 B2. Claims 1-20 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,974,484 B2. A terminal disclaimer in compliance with 37 CFR

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§1.321(c) or 1.321(d) is attached to this paper in the Appendix and refers to all three commonly owned prior patents. Therefore, Applicant respectfully requests withdrawal of these rejections and allowance of these claims.

Claims 1-6, 8 and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by Helmy, U.S. Patent No. 6,231,616 B1. Claims 7 and 10-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Helmy patent.

Claim 1 has been amended to recite an artificial limb for an amputee who has a residual limb that includes a means for receiving a portion of a residual limb of an amputee; a means for applying vacuum to the means for receiving the residual limb portion; a means for supporting the weight of the amputee when the residual limb portion is received within the receiving means; a means for reducing loss of vacuum against the residual limb portion during a weight-bearing phase of walking by the amputee; and a means for reducing loss of vacuum against the residual limb portion during a non-weight bearing phase of walking by the amputee. Claim 1 now also recites that the artificial limb includes a means for totally contacting the residual limb portion so as to provide equal weight distribution over the residual limb portion, and absorb and dissipate mechanical and shear forces and shock, when the residual limb portion is received within the receiving means. In addition, it includes a means for evenly distributing the vacuum between the means for receiving and the residual limb portion by evenly applying vacuum over the means for totally contacting the residual limb portion within the means for receiving.

The patent to Helmy, on the other hand, is directed to a modular liner for a limb stump prosthesis. Helmy discloses a modular liner assembly including a thin, elastic inner liner 20, a plurality of gelatinous shims 18 applied to the inner liner 20, a gelatinous textured intermediate liner 28, and a highly elastic and tough outer liner 34 having "a higher modulus and hardness than either of the other liners." [Col. 6, Lines 23-60] This modular liner also includes a seal 29 to make "substantially vacuum tight the interstitial space between the amputee's stump 10 and the inner liner 20." [Col. 6, Lines 38-45] In addition, this modular

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liner creates an interstitial space "between the outer liner 34 and a prosthesis socket inner surface 50." [Col. 7, Lines 10-15]

Helmy also discloses a vacuum pump 30, "which is in fluid communication with the tube or tubes 22" and "affords fluid communication between the inside of the tube and the inner wall 26 of the inner liner 20." This passageway "enables a vacuum to be taken at the interface between the stump 10 and the inner wall 26 of the inner liner 20," drawing the modular liner assembly into "close conformity with the surface 12 of the stump 10." [Col. 7, Lines 7-25] The socket is also adapted to receive a tube 22 "for applying vacuum between the outer liner 34 and the prosthesis socket inner surface 50." [Col. 7, Lines 39-41] The "evacuation of air space between the modular liner assembly and the prosthesis will result in a tight conforming fit of the prosthesis to the assembly." [Col. 7, Lines 50-53]

The Office Action asserts that Helmy illustrates a means for applying vacuum to a residual limb received within a socket and a means for reducing loss of vacuum against the residual limb during the gait cycle. However, Helmy neither discloses nor suggests a means for totally contacting the residual limb portion so as to provide equal weight distribution over the residual limb portion, and absorb and dissipate mechanical and shear forces and shock, when the residual limb portion is received within the receiving means, as recited in amended claim 1. On the contrary, it is the inner liner 20 that is in contact with the residual limb 10 and the patent clearly states that there are "interstitial spaces between the amputee's limb stump 10 and the inner liner 20." [Col. 7, Lines 11-12] Also, that the inner liner 20 is a "thin, elastomeric liner" that "is quite soft and like fat tissue in texture and response." [Col. 6, Lines 32-33] In addition, it is stated that it is the intermediate liner 28 that "serves as the weight-bearing, energy-absorbing and conforming layer," not the inner layer 20. [Col. 6, Lines 53-56]

Helmy also neither discloses nor suggests that the artificial limb includes a means for evenly distributing the vacuum between the means for receiving and the residual limb portion by evenly applying vacuum over the means for totally contacting the residual limb portion within the means for receiving, as recited in amended claim 1. If one were to assert

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that inner liner 20 illustrates the "means for totally contacting the residual limb portion," then intermediate liner 28 and outer liner 34 would theoretically have to serve as the "means for evenly distributing the vacuum" between the socket and the stump. However, nothing in the Helmy disclosure teaches or suggests that these two liners either serve this function or would even be capable of serving this function. Instead, Helmy's modular liner assembly is designed to deal with two separate areas of vacuum, such that the vacuum between the liner and the stump is distinct from and addressed quite differently than the vacuum between the socket and the liner.

Therefore, Helmy fails to anticipate amended claim 1. Applicant respectfully requests withdrawal of this rejection and allowance of this claim. In like manner, claims 2-9 (original or amended) depend from allowable claim 1 and thus are allowable for at least the same reasons. In particular, amended claim 9 is allowable over Helmy because it now recites that the means for totally contacting the residual limb portion comprises a flexible polyurethane liner that tacks up to the skin of the residual limb portion and the means for evenly applying the vacuum comprises a thin, fabric sheath. The inner liner 20 of Helmy clearly doesn't tack up to the skin of the stump because vacuum is being applied between the two, and there are no thin, fabric sheaths disclosed or suggested as part of the modular liner assembly in Helmy. Applicant therefore respectfully requests withdrawal of these rejections and allowance of these claims.

Independent claims 10 and 18 have been amended in a manner consistent with amended claim 1. Therefore, the same reasoning as to the allowability of claim 1, also applies to these two claims. In like manner, claims 11-17 and 19-20 depend from allowable claims 10 and 18, respectively, so are also allowable for at least the same reasons. In particular, amended claim 15 recites that the sheath comprises a thin knitted fabric, as stated above, nothing being formed from or including a thin knitted fabric is disclosed or suggested as part of the modular liner assembly of Helmy. Applicant therefore respectfully requests withdrawal of the remainder of the rejections and allowance of these claims.

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In conclusion, all of the claims remaining in this application should now be seen to be in condition for allowance. A prompt notice to that effect is respectfully solicited. If there are any remaining questions, the Examiner is requested to contact the undersigned at the number listed below.

Respectfully submitted,

FAEGRE & BENSON LLP

By:



Lynn C. Cameron, 44,581

612/766-8073

Customer No.: 25764

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APPENDIX

TERMINAL DISCLAIMER – PTO Form SB/26 (modified)